

IMAGING PERFORMED BY

IntraPet.com



SonoPath

Clinical Sonography & Telectology

EDUCATIONAL TELECONSULTATION SERVICES™

1-800-838-4268 info@sonopath.com SonoPath.com

DATE

12/15/22

PATIENT

Kookie Lorenzana

SPECIES

Canine

BREED

Shih Tzu

SEX

Spayed Female

AGE

4/15/10

WEIGHT

13.4 Pounds

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Stephanie Warga
RDCS, RVT

HOSPITAL NAME

DocSide VMC

REFERRING VET

Dr. Tierney

INVOICE

43500

PRESENTING CLINICAL SIGNS

Came in for PE and follow up labs to see if improvement after being on antibiotics. Recc repeat CBC/CHM and UA 4 weeks after stopping abx
Dog has uroliths therefore gets recurrent UTI's - need to periodically check UA. If BW WNL, rec repeat Sonogram

Current Medications: Ursodiol SID, K/D, Denamarin SID, Welactin SID
gabapentin for pain

Lab Results: AST 110, ALT 439, ALK PHOS 315, WBC 17.1, Neutrophils 41, Lymphocyte 51, ABS Lymph 8721, ABS Monocyte 855.

Date of Previous IntraPet Ultrasound: 10/17/22. See attached.

Sedation: Midazolam/Torbugesic IV.

Stat Report: Not requested.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. Anechoic urine present. No evidence of inflammatory or neoplastic changes were noted. Ureteral papillae were normal. Trace amount of proximal urethral sand noted.

The **kidneys** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some age-related loss of curvilinear patterns regarding the capsule and C/M junction. The cortices presented largely uniform texture with some increased echogenicity expected for his age patient. Medullary structure differed distinctly from that of the cortex. Pelvic mineralization noted. The left kidney measured 4.25 cm. The right kidney measured 4.55 cm.

Adrenal Glands

Both **adrenal glands** were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The left adrenal gland measured 1.87 cm x 0.54 cm at the caudal pole and 0.48 cm at the cranial pole. The right adrenal gland measured 1.84 cm x 0.43 cm at the caudal pole and 0.64 cm at the cranial pole.

Spleen

The expansive **splenic** nodule noted on the prior sonogram has increased in size to 2.1 cm x 1.5 cm. Minor heterogeneous changes noted elsewhere in the spleen.

Liver

The **liver** was slightly subnormal in size. Slight increased portal markings noted. The gallbladder was overdistended with some suspended immobile debris along with biliary sand.

Gastrointestinal

Excessive **gastric** gas noted. Prominent gastric rugal folds noted. Slight iso- to hypoechoic luminal structures noted. These may be portions of prominent mucosa or non-obstructive foreign matter or medications. The small intestine and colon were unremarkable. Curvilinear patterns were respected.

Pancreas

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Some parenchymal remodeling, however, with mild deviation from curvilinear normalcy was observed. Pancreatic duct and capsular irregularities were present consistent with age related changes. If pain upon

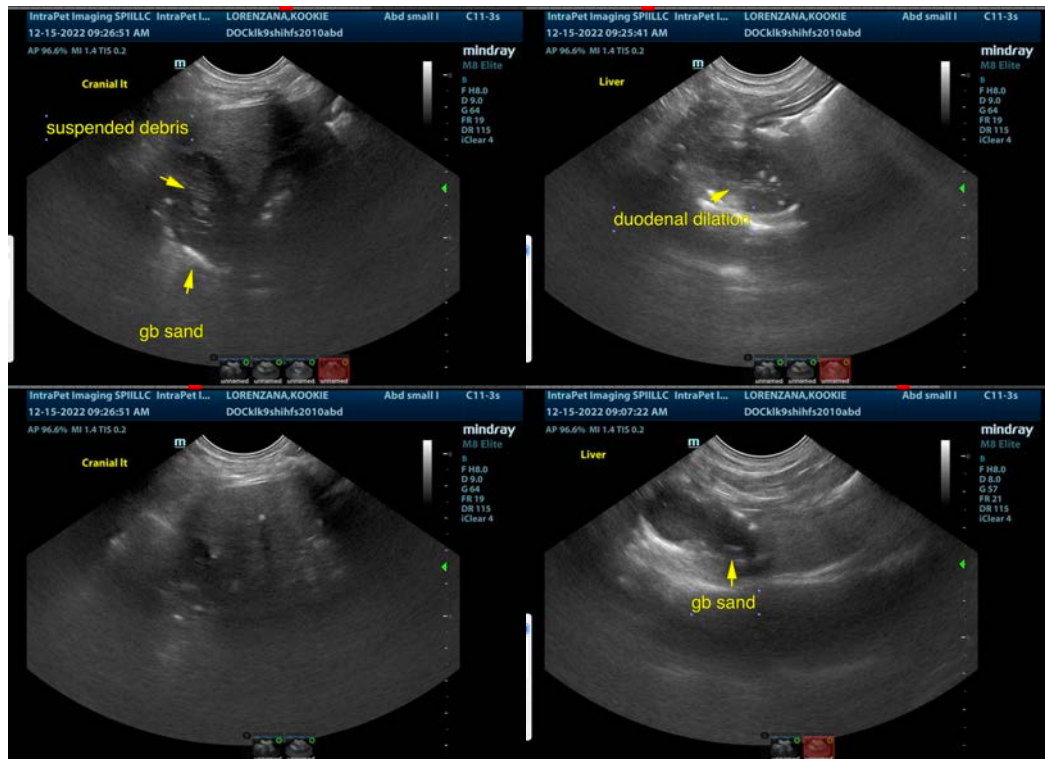
imaging (+ Murphy sign) was present or if the patient is focally painful in subxyphoid palpation then low-grade smoldering chronic pancreatitis should be suspected.

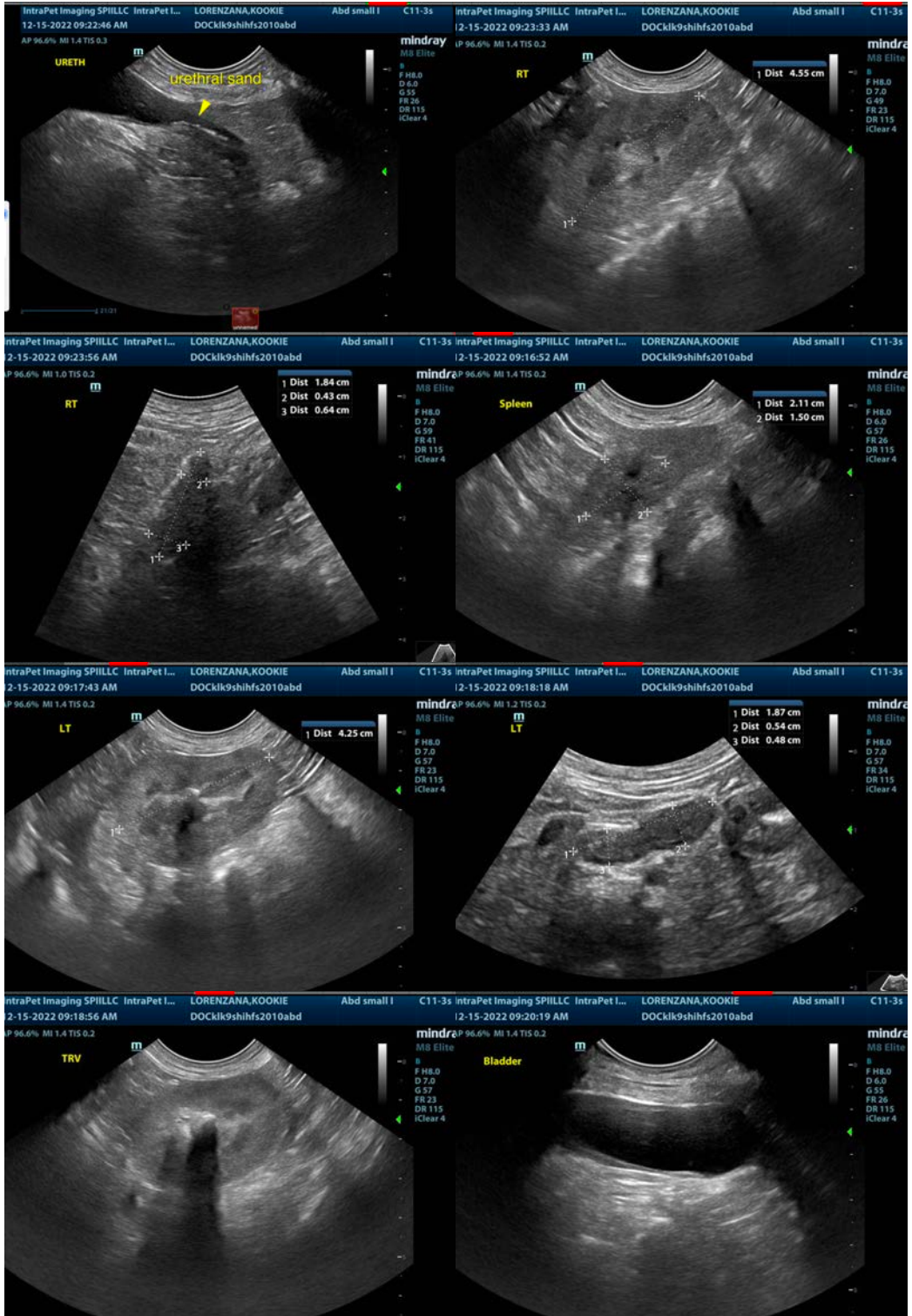
ULTRASONOGRAPHIC FINDINGS

- Expansive splenic nodule
- Trace urethral sand
- Renal calculi and mild degenerative changes
- Subnormal liver size
- Gallbladder sand and calculi
- Gastric artifact with prominent mucosa
- Pancreatic remodeling

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The patient is likely passing sand periodically from the kidneys to the bladder. The bladder sand will likely liberate without difficulty. The gallbladder sand, urinary bladder sand, and nephrolithiasis are all non-obstructive. I believe that the gallbladder has progressed to an atypical mucocoele formation with biliary sand. I'm concerned about the gallbladder causing low-grade clinical issues +/- underlying gastritis, given the amount of GI gas noted. I am concerned about the expansive splenic nodule. This may still be benign yet is somewhat precarious. Splenectomy, cholecystectomy, +/- GI biopsies would be a personal preference on management of this patient. I





The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance please contact me.

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com
info@SonoPath.com